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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,871	07/16/2003	Thomas George Busch	13DV13427-6	9105
7590 06/18/2004				
Robert B. Reeser, III Armstrong Teasdale LLP Suite 2600 One Metropolitan Square St. Louis, MO 63102		EXAMINER CASAREGOLA, LOUIS J		
		ART UNIT PAPER NUMBER 3746		
DATE MAILED: 06/18/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/620,871

Applicant(s)

BUSCH, THOMAS GEORGE

Examiner

Louis J. Casaregola

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4,5 is/are rejected.
- 7) ☒ Claim(s) 2-3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

### ***Objections To Claims***

Claims 1-5 are objected to under 37 CFR § 1.75(a) as including the following errors:

Claim 1 and related dependent claims 2-5 recite "a fuel bypass valve" in claim 1, line 4, and again in claim 1, line 5. This double recitation of the same element is confusing. If the bypass valve in line 5 is the same as the bypass valve in line 4, the language in line 5 should be changed to "the" or "said" bypass valve in order to improve clarity.

Claim 1 further refers to "the fuel shutoff valve"; see lines 7-8. The cited expression lacks antecedent basis and should be changed to "a fuel shutoff valve".

### ***Claim Rejections - 35 USC § 102***

Claims 1, 4, and 5 are rejected under 35 U.S.C. § 102(b) as being anticipated by Smith.

The broadly recited steps of the claimed fuel control method read on the operation of prior art fuel controls of the type disclosed by Smith. See for example Smith's Figure 1 and note first and second fuel control valves 4 and 13. The first valve controls fuel under normal conditions and corresponds to the claimed metering valve, and the

second valve takes over fuel control upon operational failure of the first valve; see column 1, lines 35-38. Note also that second valve 13 is operated by torque motor or servo 15, and hence, valve 13 is a servovalve. Attention is further called to bypass valves 5 and 14 as well as shutoff valve 20.

It is additionally pointed out that while the claims are directed to a method of preventing turbine overspeed, the recited control steps are not specifically linked with or responsive to speed. While it may be presumed that the fuel control steps in the present claims will inherently have a limiting effect on speed, this presumption also applies to the equivalent control steps performed by the cited prior art.


### ***Allowable Subject Matter***

Claims 2 and 3 contain allowable subject matter but are objected to as depending from a rejected parent claim. These claims will be allowed if rewritten in independent form and amended to overcome the 1.75(a) objection set forth above.

***Additional References***

Hansen and Mahoney et al are cited as disclosing further pertinent examples of gas turbine fuel control systems.

L. J. Casaregola  
703-308-1027 (M-F; 7:30-4:00)  
703-872-9306 FAX  
June 16, 2004

  
LOUIS J. CASAREGOLA  
PRIMARY EXAMINER

If repeated attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu, can be reached at 703-308-2675.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).